

**FAIRCHILD**DU MONT LABORATORIES  
SCIENTIFIC INSTRUMENT DEPARTMENT**Time-Mark Generator  
Transistorized****TYPE 781****NEW****TECHNICAL SPECIFICATIONS****TIMING MARKERS****MARKER INTERVALS:**

Microseconds - 1, 5, 10, 50, 100 and 500.

Milliseconds - 1, 5, 10, 50, 100 and 500.

Seconds - 1 and 5.

**RISE TIME:** 70 nanoseconds maximum at 1  $\mu$ s, 500 nanoseconds maximum at 5 secs. (terminated in 50 ohms).**OPEN CIRCUIT VOLTAGE:** Marker Out Connector - 5 volts open circuit; 3 volts with 390-ohm termination, 1 volt with 50-ohm termination. Tip Jack - 30 volts open circuit; 15 volts with 600-ohm termination.**OUTPUT IMPEDANCE:**

Marker Out Connector - 390 ohms.

Tip Jacks - 600 ohms.

**JITTER:** Pulse-to-pulse marker jitter shall not exceed 0.05%.**DELAY:** The output marker pulse is essentially coincident with the trigger output pulse of same timing rate.**SINE-WAVE OUTPUTS****FREQUENCIES:** 5 Mc, 10 Mc, and 50 Mc.**OPEN CIRCUIT VOLTAGE:** 6 volts minimum peak-to-peak, output into 50 ohms; 3 volts minimum p-p. 3 volts minimum peak-to-peak across 50 ohms.**AVAILABILITY:** Front-panel push-button switches are provided to connect any one of three sine-wave outputs to the MARKER OUT connector.**TRIGGERING PULSES****REPETITION RATE:** Choice of - 1; 10; 100; 1000; 10,000; 100,000 pulses per second.**OPEN CIRCUIT VOLTAGE:** 10 volts minimum, 5 volts terminated in 50 ohms.**RISE TIME:** 90  $\mu$ sec maximum, terminated in 50 ohms.

DU MONT LABORATORIES • DIVISIONS OF FAIRCHILD CAMERA AND INSTRUMENT CORPORATION

SCIENTIFIC INSTRUMENT DEPARTMENT • 750 BLOOMFIELD AVENUE, CLIFTON, NEW JERSEY

## TECHNICAL SPECIFICATIONS TYPE 781

### CRYSTAL OSCILLATOR AND BASIC SYSTEM ACCURACY

FREQUENCY: 1 megacycle  $\pm$  10 cps ( $\pm 0.001\%$ ); may be precisely set for 1 Mc.

STABILITY: Within 3 parts per million in 24 hours. Crystal oven is used to stabilize frequency.

### ACCESSORIES

Cables - 50 ohms (2 each) 42 inches long BNC to BNC.

Power cord adapter - 3 connectors (1 each).

Instruction manual - (1 each).

### PHYSICAL CHARACTERISTICS - (Half rack universal package)

Height	5 $\frac{1}{4}$ inches	(13.3 cm)
Width	8 $\frac{1}{4}$ inches	(21 cm)
Depth (includes handles)	10.5 inches	(26.6 cm)
Weight	9.5 pounds	(4.3 kg)

### POWER

Line Voltage From 105 to 125 volts and 210 to 250 volts

Line Frequency Operation from 48 to 1000 cycles

Power (Average) 21 watts at 115-volt, 60-cycle line

### AVAILABLE ACCESSORIES (Optional)

Type 4285A	- 50 ohms termination . . . . .	\$16.50
Type 7093	- 50 ohms 5 to one attenuator pad . . . . .	16.50
Type 7082	- Cable BNC to BNC 42 inches long . . . . .	4.75
Type 7094	- Cover, for panel and storage of accessories . . . . .	25.00
Type 7095	- Rack mount hardware for stacking 2 half rack units . . . . .	25.00
Type 7096	- Rack ears for $\frac{1}{2}$ rack mounting (2 each) . . . . .	5.00
Type 7080	- Panel BNC to binding post adapter . . . . .	2.35
Type 7083	- Cable BNC to alligator clips 42 inches long . . . . .	3.85

Type 781 Time-Mark Generator . . . . . \$595.00 FOB, Clifton, N.J.